

Remarks

The Applicants have amended the specification to place it into final form for allowance. A Substitute Specification (Marked-Up) is enclosed with the amendments to the specification, together with a Substitute Specification (Clean Copy). Entry into the official file is respectfully requested.

The Applicants have amended Claims 1 and 4 by adding B in an amount of 0.0005–0.0030%. Those additions were made from Claims 3 and 6, respectively, where that subject matter was previously recited. Thus, Claims 3 and 6 have also been amended to delete reference to the presence of B. Entry of the above amendments into the Official File and consideration on the merits is respectfully requested.

Claims 1–3 stand rejected under 35 U.S.C. §103 as being obvious over Matsuoka. The Applicants note with appreciation the Examiner's detailed comments hypothetically applying Matsuoka to those claims. However, the Applicants respectfully submit that Matsuoka fails to provide teachings that would lead one skilled in the art to the subject matter of Claims 1–3. Reasons are set forth below.

The Applicants' Claims 1–3 require B being present in an amount of 0.0005–0.0030%. B is an element suppressing the transformation from the austenite phase to the ferrite phase to enhance hardenability, and largely promote formation of the low-temperature transformation phase in the cooling stage at the annealing step after the cold rolling. That highly contributes to the increase in the strength in the steel sheet. Further, since B can suppress recrystallization of worked austenite, the transformation from the non-recrystallized austenite to ferrite is promoted to develop a {113}<110> structure, whereby the Young's modulus of the steel sheet is increased at the subsequent cold rolling and annealing steps. The Applicants respectfully submit that Matsuoka fails to disclose the presence of B at all. As such, the Applicants respectfully submit that Matsuoka is non-enabling as prior art against Claims 1–3 and cannot support a rejection under §103. Withdrawal of the rejection is respectfully requested.

Claims 4–6 stand rejected under 35 U.S.C. §103 over the hypothetical combination of JP '804 (particularly the machine English translation) with Matsuoka. The Applicants again note with appreciation the Examiner's helpful comments hypothetically applying the combination against Claims 4–6. The Applicants nonetheless respectfully submit that the combination is inapplicable to Claims 4–6. Reasons are set forth below.

As noted above, Matsuoka fails to disclose the presence of B. Also, the Applicants have carefully reviewed the machine English translation of JP '804 and respectfully submit that it also fails to disclose B. Thus, the Applicants respectfully submit that, even if one skilled in the art were to hypothetically combine JP '804 with Matsuoka, the steel sheets resulting from that combination would still be quite different from the subject matter of Claims 4-6. Withdrawal of the rejection is respectfully requested.

Claims 1-6 stand provisionally rejected over non-statutory obviousness-type double patenting over Claims 1-6 of co-pending Application 10/578,524. Even though this rejection is provisional, the Applicants enclose a duly executed Terminal Disclaimer to facilitate early allowance of the entire Application. Withdrawal of the rejection is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



T. Daniel Christenbury
Reg. No. 31,750
Attorney for Applicants

TDC/vbm
(215) 656-3381